

The Knowledge Bank at The Ohio State University
Ohio State Engineer

Title: Front Matter

Issue Date: Oct-1928

Publisher: Ohio State University, College of Engineering

Citation: Ohio State Engineer, vol. 12, no. 1 (October, 1928), 1-4.

URI: <http://hdl.handle.net/1811/34357>

Appears in Collections: [Ohio State Engineer: Volume 12, no. 1 \(October, 1928\)](#)

Prof Morris

THE OHIO STATE ENGINEER



MEMBER OF ENGINEERING COLLEGE MAGAZINES ASSOCIATED

TA
1
036
v. 12, no. 1
Oct. 1928
copy 3

OCTOBER
1 9 2 8

v. 12 #1

POWER PLANTS

ONE MILLION K.W. is the ultimate capacity of the Central Station shown at the top of the page. The Laundry, illustrated below, operates a 70 h.p. boiler.

Both plants are equipped with fuel burning apparatus, designed, manufactured and installed by Combustion Engineering Corporation.

There is no sharp dividing line between the responsibilities of the stoker or burner manufacturer, the furnace builder and the boiler maker. Steam Generation is a combined process of heat liberation and heat absorption. The performance of individual elements is secondary to the performance of the combination—as a unit. The ultimate goal sought is to produce a dependable supply of steam at minimum cost.

The operation of the Laundry is dependent upon the performance of this 70 h.p. boiler, while thousands of New Yorkers rely upon the East River Station for light, power, transportation and the many material comforts of life which electricity has made available.

The engineering, research and manufacturing facilities of Combustion Engineering Corporation are available to American Industry in raising the standards of Fuel Burning and Steam Generation, throughout the entire range from 70 h.p. to 1,000,000 K.W.—or beyond.

COMBUSTION ENGINEERING CORPORATION

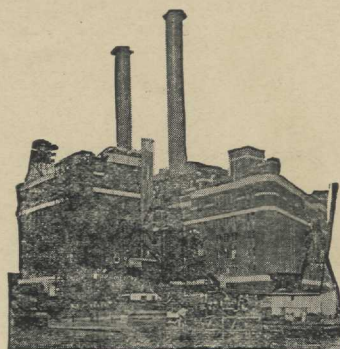
International Combustion Building, 200 Madison Ave., New York

A Subsidiary of

INTERNATIONAL COMBUSTION ENGINEERING CORPORATION



A 70 h. p. boiler serves this laundry



NEW YORK EDISON COMPANY
Thomas E. Murray, Inc.
Designing Engineers

POWER PLANTS

From 70 H. P. to 1,000,000 KW. ult. ✓

BOILERS

From 70 to over 4,000 rated boiler H. P.

PULVERIZED FUEL

Complete systems with Mill capacities from 600 to 60,000 lbs. of coal per hour.

STOKERS

For capacities from 250 to 40,000 lbs. of coal per hour.

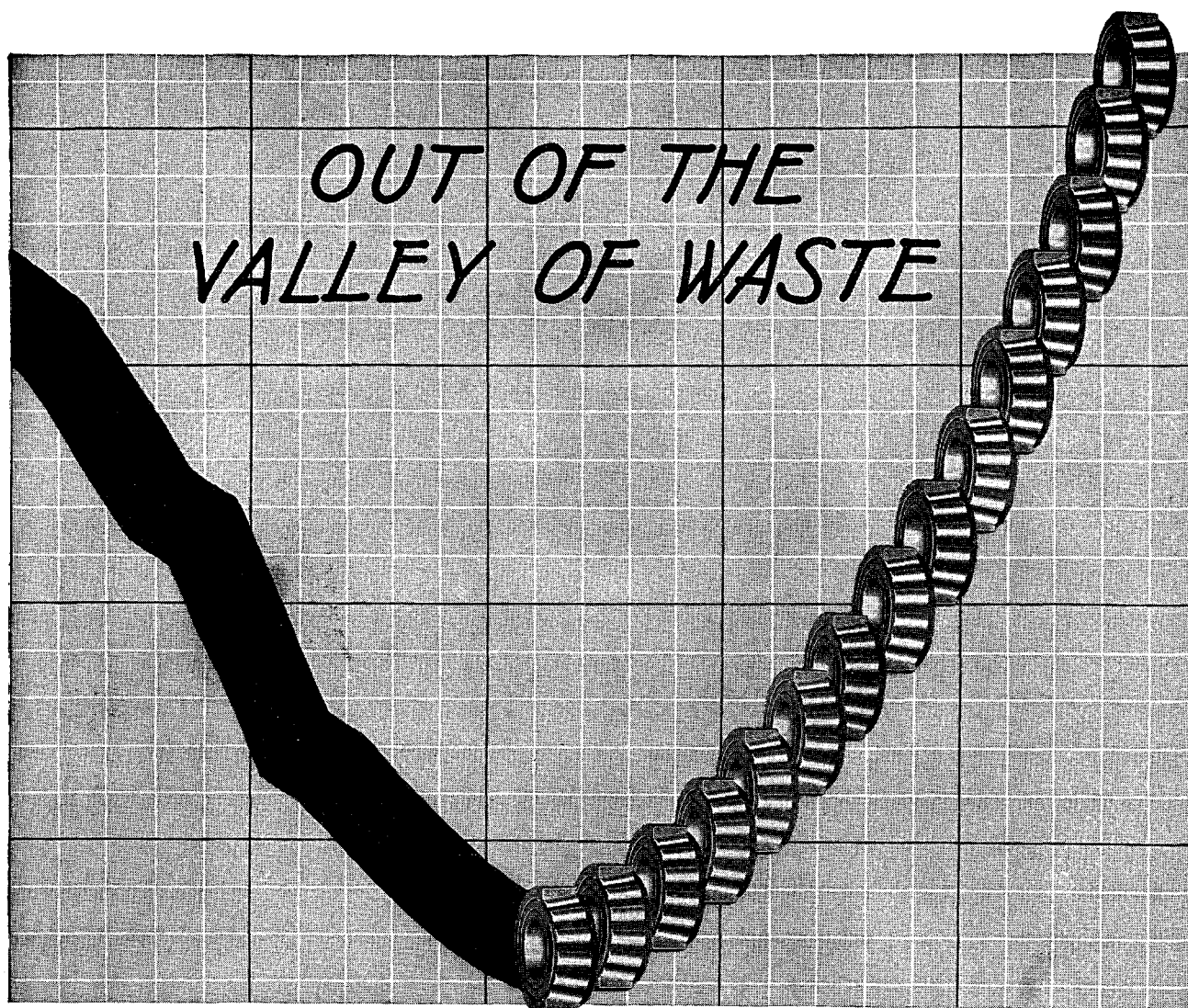
WATER COOLED FURNACES

From 90 sq. ft. to 4,132 sq. ft. of water wall surface.

AIR PREHEATERS

From 217 to 66,942 sq. ft. of heating surface.

COMBUSTION ENGINEERING



OUT OF THE VALLEY OF WASTE

THE moment you put theoretical knowledge into practice you will find that the factor of friction is something all Industry has to fight.

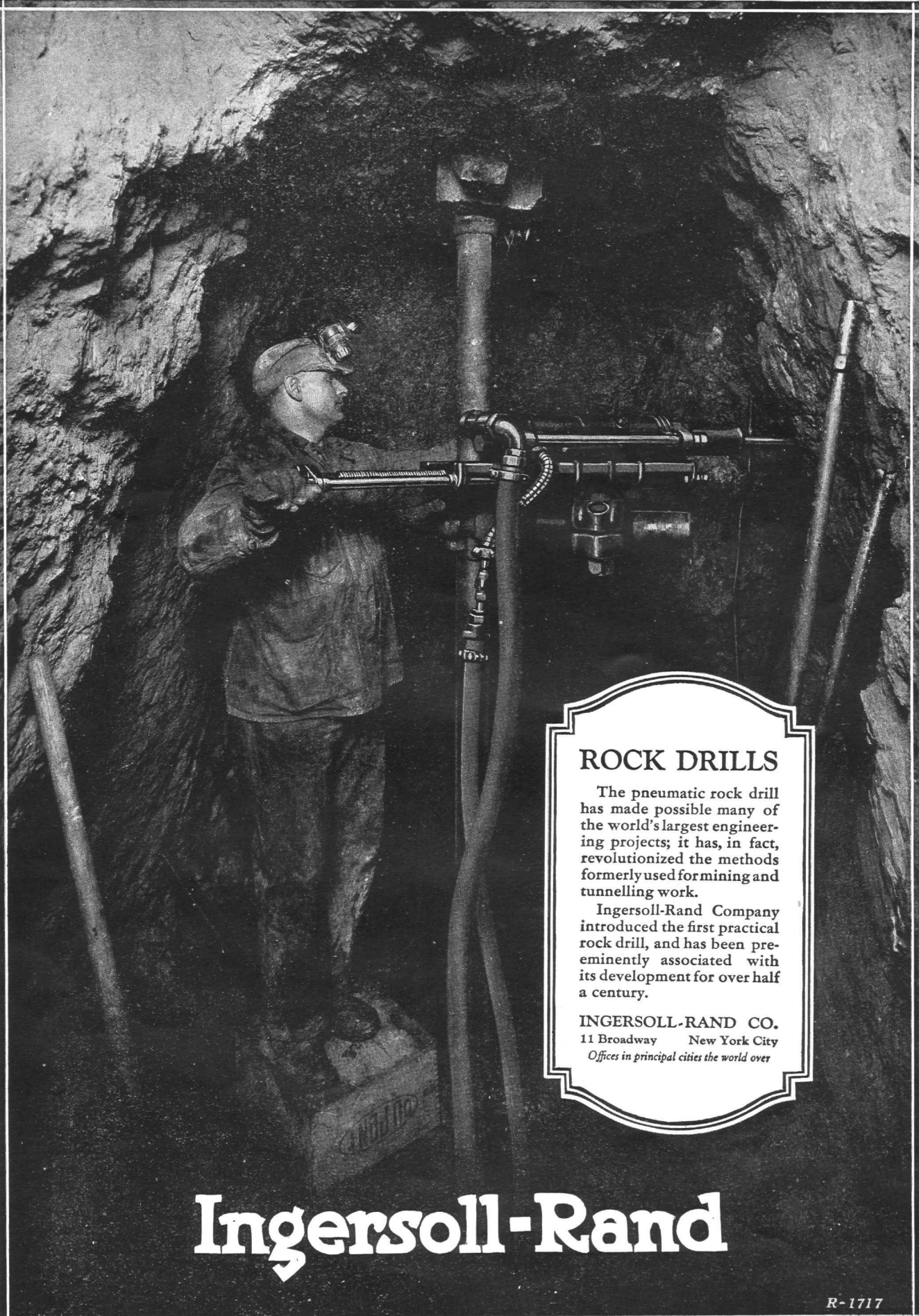
You will also find the foremost factor in fighting friction to be Timken Bearings with their full thrust-radial capacity and anti-friction properties, their Timken-made electric steel, Timken tapered construction and Timken *POSITIVELY ALIGNED ROLLS*.

Installed at the hard service points in motor vehicles and any type of industrial machinery, it becomes graphically apparent that Timken Bearings are bringing Industry out of the valley of waste and up into the higher plane of profit.

THE TIMKEN ROLLER BEARING CO., CANTON, OHIO

TIMKEN *Tapered Roller* BEARINGS

OCTOBER, 1928



ROCK DRILLS

The pneumatic rock drill has made possible many of the world's largest engineering projects; it has, in fact, revolutionized the methods formerly used for mining and tunnelling work.

Ingersoll-Rand Company introduced the first practical rock drill, and has been pre-eminently associated with its development for over half a century.

INGERSOLL-RAND CO.
11 Broadway New York City
Offices in principal cities the world over

Ingersoll-Rand

R-1717

OHIO STATE ENGINEER

Published in October, November, January, February, March, April, and May by the students in the College of Engineering, Ohio State University

Vol. XII

OCTOBER, 1928

No. 1

CONTENTS

COVER — E. A. HITCHCOCK, <i>Dean of College of Engineering</i>	
FROM OUR DEAN — By DEAN E. A. HITCHCOCK.....	5
THE RELATION CURVE — By DONALD A. NAFTZGER.....	6
OUR DEPARTMENTAL CHIEFS.....	7
LIMITED CUT-OFF APPLIED TO LOCOMOTIVES — By HENRY P. SEYMOUR.....	8
ALUMNI NEWS.....	11
THE BOOKSHELF.....	12
ENGINEERING ABSTRACTS.....	14
EDITORIAL.....	16
CRANKS AND COUNTERSHAFTS.....	20
WHO MAKES THE EXECUTIVE.....	24

Subscription price, \$1.50 per year, 25c per copy. Checks, money orders, etc., payable to the Ohio State Engineer.

Entered as second-class matter May 15, 1922, at the post office at Columbus, Ohio, under the act of March 3, 1879. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917. Authorized December 8, 1922.

MEMBERS OF THE ENGINEERING COLLEGE MAGAZINES ASSOCIATED

Chairman: Prof. Leslie F. Van Hagan, College of Engineering, Madison, Wisconsin

The Transit
Iowa Engineer
Colorado Engineer
Nebraska Blue Print
Sibley Journal of Engineering
Rose Technic
Michigan Technic
The Ohio State Engineer
Penn State Engineer
Minnesota Log

University of Virginia Journal
of Engineering
Wisconsin Engineer
Tech Engineering News
Cornell Civil Engineer
Kansas State Engineer
Princeton E. A. News Letter
The Technigraph
Pennsylvania Triangle
Kansas Engineer

ENGINEERING

At

Ohio State University

Courses

Mining	Ceramic
Mechanical	Architecture
Civil	Industrial
Electrical	Architectural
Chemical	Metallurgical
Engineering Physics	

FOR INFORMATION WRITE

COLLEGE OF ENGINEERING

OHIO STATE UNIVERSITY

COLUMBUS, OHIO